MONTHLY WEATHER REVIEW.

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INTRODUCTION.

The MONTHLY WEATHER REVIEW for August, 1905, is based on data from about 3486 stations, classified as follows:

Weather Bureau stations, regular, telegraph, and mail, 176; West Indian Service, cable and mail, 4; River and Flood Service, regular 52, special river and rainfall, 363, special rainfall only, 98; cooperative observers, domestic and foreign, 2565; total Weather Bureau Service, 3258; Canadian Meteorological Service, by telegraph and mail, 33; Meteorological Service of the Azores, by cable, 2; Meteorological Office, London, by cable, 8; Mexican Telegraph Company, by cable, 3; Army Post Hospital reports, 18; United States Life-Saving Service, 9; Jamaica Weather Service, 130; Costa Rican Meteorological Service, 25. Total, 3486.

Since December, 1904, the Weather Bureau has received an average of about 1700 reports from as many observers and vessels, giving international simultaneous observations over the Atlantic and Pacific oceans at 12 noon, Greenwich time, or 7 a. m., seventy-fifth meridian time. These are charted, and, with the corresponding land observations, will form the framework for daily weather charts of the globe.

Special acknowledgment is made of the hearty cooperation of Prof. R. F. Stupart, Director of the Meteorological Service of the Dominion of Canada; Señor Manuel E. Pastrana, Director of the Central Meteorological and Magnetic Observatory of Mexico; Camilo A. Gonzales, Director-General of Mexican Telegraphs; Capt. S.I. Kimball, General Superintendent of the United States Life-Saving Service; Capt. H. M. Hodges, U. S. N. (Retired), Hydrographer, United States Navy; Anastasio Aljaro, Director of the Physico-Geographic Institute, San José, Costa Rica; Commandant Francisco S. Chaves, Director of the Meteorological Service of the Azores, Ponta Delgada, St. Michaels, Azores; W. N. Shaw, Esq., Secretary, Meteorological Office, London; H. H. Cousins, Chemist, in charge of the Jamaica Weather Office; Señor Enrique A. Del Monte, Director of the the Meteorological Service of the Republic of Cuba; Rev. L. Gangoiti, Director of the Meteorological Observatory of Belen College, Havana, Cuba.

Attention is called to the fact that at regular Weather Bureau stations all data intended for the Central Office at Washington are recorded on seventy-fifth meridian or eastern standard time, except that hourly records of wind velocity and direction, temperature, and sunshine are entered on the respective local standards of time. As far as practicable, only the seventy-fifth meridian standard of time, which is exactly five hours behind Greenwich time, is used in the text of the REVIEW. The standards used by the public in the United States and Canada and by the cooperative observers are believed to conform generally to the modern international system of standard meridians, one hour apart, beginning with Greenwich. The Hawaiian standard meridian is 157° 30′, or $10^h\ 30^m$ west of Greenwich. The Costa Rican standard meridian is that of San José, $5^h\ 36^m$ west of Greenwich.

Barometric pressures, whether "station pressures" or "sea-level pressures", are now reduced to standard gravity, so that they express pressure in a standard system of absolute measures.

In conformity with Instructions No. 43, March 29, 1905, the designation "voluntary", as applied to the class of observers performing services under the direction of the Weather Bureau without a stated compensation in money, is discontinued, and the designation "cooperative", will be used instead in all official publications and correspondence.

Hereafter the titles of the respective forecast districts will be as used in the current REVIEW to accord with paragraph 236 of Station Regulations, dated June 15, 1905.

FORECASTS AND WARNINGS.

By Prof. E. B. GARRETT, in charge of Forecast Division.

From the 1st to 6th and 17th to 20th barometric disturbances of moderate strength advanced northeastward over the western British coasts, and during the third decade of the month an extensive, though shallow, depression covered the British Isles and moved thence eastward over continental Europe. In the vicinity of the Azores prevailing high barometer was interrupted only from the 12th to 14th. Several disturbances of slight intensity passed from the American Continent over Newfoundland, and during the last three days of the month pressures were low over New England and Nova Scotia. From the 17th to 19th the barometer was relatively low on the south Atlantic coast and over Florida. On the 27th and 28th low pressure prevailed from Florida over Bermuda, and during the night of the 27–28th a steamship foundered off the extreme north Atlantic coast of Florida and a number of vessels put into port in distress. Advices regarding the threatening character of the weather on the south Atlantic coast were telegraphed to all Florida ports at noon of the 27th.

No well defined storms of the hurricane type visited any of the islands of the West Indies. About the 20th, however, there was evidence of a storm to the southeast of the Windward Islands.

The barometric disturbances that visited the United States were of slight intensity and shipping on the seacoast and Great Lakes was not imperiled by general storms.

Attending the passage of the barometric depressions traced on Chart II, heavy local rains occurred at points along the middle and east Gulf coasts from the 1st to 5th, and in middle and northern districts at intervals during the month. During the evening of the 30th tornadic storms appeared in central New York and northeastern Pennsylvania. Reference is made in the report of the Denver Forecast District to a torrential rain near Trinidad, Colo., during the evening of the 24th. On the evening of the 27th a heavy wind and dust storm visited Oregon and Washington.

Although no prolonged periods of excessively high temperature were experienced in the middle and northern districts, high temperatures prevailed at intervals in the Great Plains region, and on the 24th maximum readings were above 100° in parts of Kansas. Frost-bearing cool waves visited some of the northern districts during the third decade of